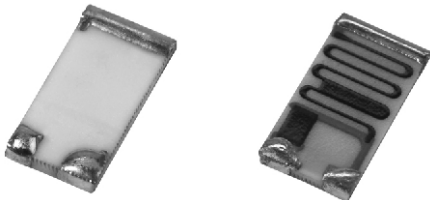# High Voltage Chip Divider

## FEATURES

- High voltage up to 3000 volts

- Outstanding Stability

- Typical resistance ratios of 250:1, 500:1, etc

- Flow solderable

- Tape & Reel packaging available

- Top and Wraparound termination

- Nickel Barrier available

## ELECTRICAL SPECIFICATIONS

**Resistance range:** 1 M$\Omega$ to 20 G$\Omega$

**Resistance tolerance:** ± 1 % to ± 20 %

**Power rating:** See table

**Voltage coefficient:** See table

**Temperature coefficient:** See table

**Ratio tracking:** See table

## MECHANICAL SPECIFICATIONS

**Construction:** 96 % alumina substrate with proprietary cermet resistance element and specified termination material.

## ENVIRONMENTAL SPECIFICATIONS

**Operating temperature:** - 55 °C to + 150 °C

**Life:** Less than 0.5 % change when tested at full rated power (Reference only: Not for all values specified. Consult factory for value.)
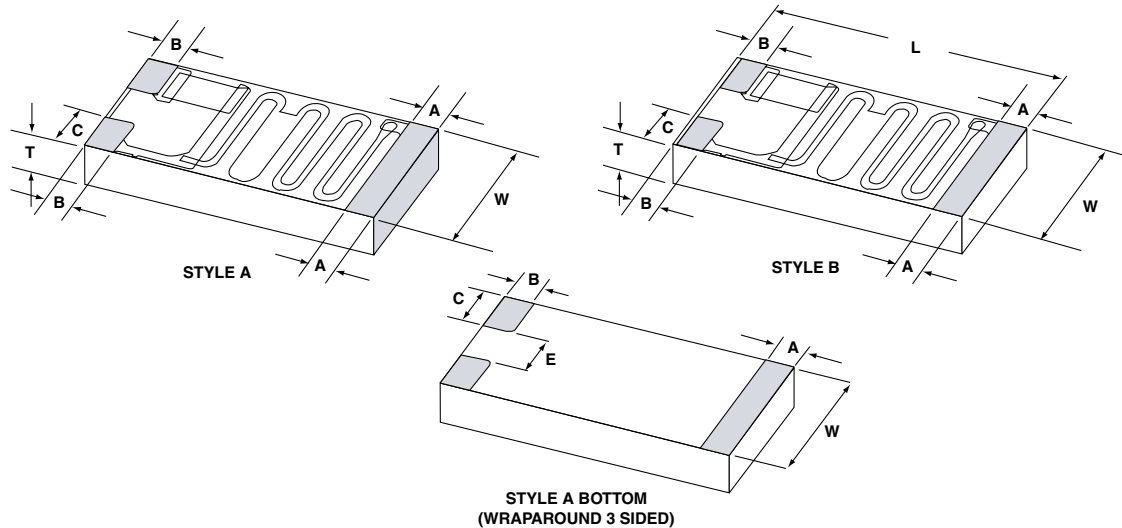
| STANDARD ELECTRICAL SPECIFICATIONS | | |
| --- | --- | --- |
| **RESISTANCE (OHMS)** | **POWER RATING (MW)** | **VOLTAGE RATING (V MAX)** |
| 20 M - 20 G | Contact Factory | 3000 |

| VOLTAGE & TEMPERATURE COEFFICIENTS OF RESISTANCE CHART TYPICAL | | | |
| --- | --- | --- | --- |
| **RESISTANCE (OHMS)** | **RATIO (TYPICAL)** | **VCR (PPM/V)** | **TCR (PPM/°C) - 55 °C to + 150 °C** |
| 20 M | 250:1 | 5 | 260 |
| 150 M | 300:1 | 5 | 80 |
| 800 M | 300:1 | 10 | 50 |
| 20 G | 700:1 | 90 | 160 |

| RATIO TRACKING (PPM/°C) | | | |
| --- | --- | --- | --- |
| **RESISTANCE (OHMS)** | **RATIO (TYPICAL)** | **COLD (+ 25 °C to - 50 °C)** | **HOT (+ 25 °C to + 150 °C)** |
| 20 M | 250:1 | 5 | 260 |
| 150 M | 300:1 | 5 | 80 |
| 800 M | 300:1 | 10 | 50 |
| 20 G | 700:1 | 90 | 160 |

*** Contact Factory for other Ratio's

# CDHV 2512

Vishay Techno     High Voltage Chip Divider

VISHAY®

## DIMENSIONAL CONFIGURATIONS in inches [millimeters]



STYLE A

STYLE B

STYLE A BOTTOM
(WRAPAROUND 3 SIDED)

| TERMINATION | LENGTH (L) ± 0.006 [0.152] | WIDTH (W) ± 0.006 [0.152] | THICKNESS (T) ± 0.002 [0.051] | A ± 0.005 | B ± 0.005 | C ± 0.005 | E ± 0.005 |
|---|---|---|---|---|---|---|---|
| STYLE A (Wraparound 3 Sided) | 0.250 | 0.126 | 0.025 | 0.025 | 0.025 | 0.040 | 0.046 |
| STYLE B (Top only) | 0.240 | 0.126 | 0.025 | 0.025 | 0.025 | 0.040 | - |

## DERATING CURVE
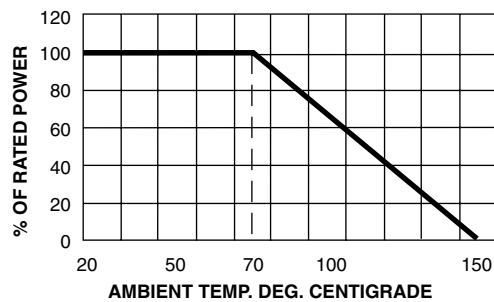


(Reference only: Not for all values specified. Consult factory for your size and value.)

## ORDERING INFORMATION

| CDHV2512 | A | A | 2005 | J | 2500 | G | e1 |
|---|---|---|---|---|---|---|---|
| MODEL | TERMINATION STYLE | TERMINATION MATERIAL | VALUE R1 | ABSOLUTE TOLERANCE | RATIO R1/R2 | RATIO TOLERANCE | TERMINATION MATERIAL |
| | A = Wraparound<br>B = Top only | A = Palladium Silver<br>B = Platinum Gold<br>C = Gold<br>D = Platinum Silver<br>E = Palladium Gold<br>F = Nickel Barrier | **Resistance Value of R1:** The first 3 digits are significant. The last digit specifies the number of zeros to follow. | F = 1 %<br>G = 2 %<br>H = 3 %<br>J = 5 %<br>K = 10 %<br>M = 20 % | The first 3 digits are significant. The last digit specifies the number of zeros to follow. | F = 1 %<br>G = 2 %<br>H = 3 %<br>J = 5 % | S2 = Sn62<br>e1 = Sn95/5 |

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